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**Identification and Detection of 1 July 2008 Dust Storm with MODIS Data**

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**Abstract**

In this research has been used from Dust hourly data (Horizontal View and meteorological code) 87 synoptic stations in 2008 year. After extraction of dusty days, 1 July 2008 selected for case study Because of the horizontal visibility lower than 1000 m (Dust Storms diagnostic criteria in this study) in most stations in the western half of Iran. Also MODIS Images of Aqua and Terra in 1 July 2008 times 8:55, 7:20 and 7:15 has been used for detection Dust Storm on Satellite images. Visual indexes of true color image and NDDI, BTD, BTDI and LBTD digital Indexes have been used for detection of Dust Storm on MODIS images. Results indicated that LRDI digital index and false color composing have the higher resolution than the other indexes for detection of dust storms. According studied satellite images and other studies, Dust Storms source of western Iran is external that their mainis clouding deserts of Syria, Arabian, Northern Africa and Iraq dried beds.

**Keywords:** Dust Storm, MODIS Aqua/Terra, Remote sensing, Iran.

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